Michigan NHSN User Group Call

AUGUST 23, 2017

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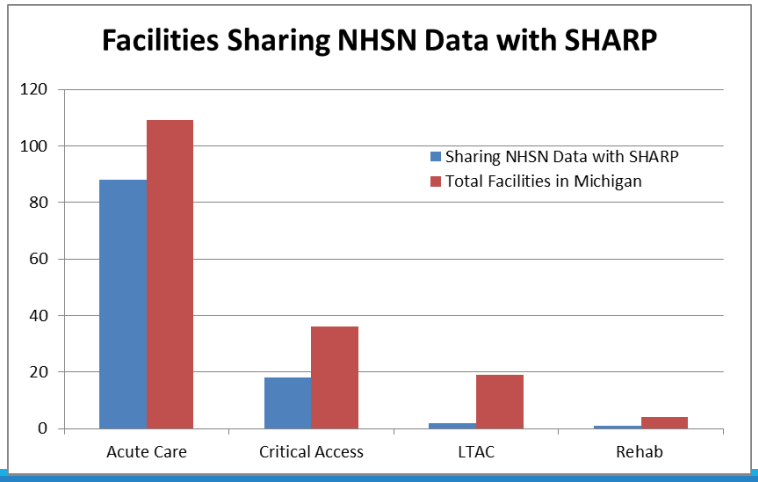
Updates on Surveillance/Reports

Surveillance Update



SHARP Reports and Surveillance Updates

Coming soon (sorry for they delay!):

- 2015 Annual (updated)
- 2016 Annual
- 2016 Q1-Q2 TAP (updated)
- 2016 Q3-Q4 TAP
- 2017 Q1 TAP

Website Updates coming soon:

- Homepage renovation/updates
- Interactive HAI tracker (in the works)

NHSN Updates

June 2017 Newsletter

2017 NHSN members meeting slides now available (from national APIC conference)

New NHSN case study published in AJIC

- SSI Case Study
- June 1, 2017 AJIC, Volume 45, Issue 6, Pages 612-614
  - Demonstrate the application of the SSI criteria along with HAI site-specific criterion
  - Identify a BSI that is secondary to an SSI
  - Apply the PATOS event detail

BSI: Odd Organisms Out

January 2017: NHSN excluded a list of enteric pathogens previously used to meet LCBI criterion

While these changes have been made in the protocol, they are not yet built into the application (so if you enter an event with these as the only organism, they will appear in your BSI data)

Exclude the following as primary LCBI reported for any 2017 events if they are the only pathogens reported for the event:

- Campylobacter, C. difficile, Shigella, Listeria, Yersinia, Enteropathogenic E. coli

Perform Device-associated Denominator Data Sampling (correctly)

Since January 2015, denominator data sampling has become an alternative method for collecting NHSN CLABSI and CAUTI denominator data in eligible location types

ICU and ward location types are eligible (excluding SCA/ONC & NICU)

- Must have an average of 75+ device days per month

Eligible

location	summaryYr	months	clabcount	numcldays	CLABRate	numpatdays
5G	2016	12	1	1270	0.787	2480

5G average CL days per month:
1270 CL days /12= **105.8**

This location has more than 75 average central-line days per month (over the past 12 months). Therefore, it is eligible to participate in denominator data sampling.

Not Eligible

location	summaryYr	months	clabcount	numcldays	CLABRate	numpatdays
CARDCRIT	2016	12	3	175	17.143	360

CARDCRIT average CL days per month:
175 CL days /12= **14.5**

This location has less than 75 average central-line days per month (over the past 12 months). Therefore, it is not eligible to participate in denominator data sampling.

Device-associated Denominator Data Sampling, cont…

How often should denominator data be sampled?

- Collected on a designated day and time each week (Mon-Fri)

Correct

	M	T	W	Th	F
Week 1	9am				
Week 2	9am				
Week 3	9am				
Week 4	9am				

Incorrect

	M	T	W	Th	F	Sat
Week 1	9am					
Week 2						3pm
Week 3			9am			
Week 4	6am					

- Data entered in:
  - Monthly total for patient days (collected daily)
  - Sampled total for patient days
  - Sampled total device days
- Once these are complete, NHSN calculates the total central-line and/or urinary catheter days

Inactivate a location in NHSN

Facility – location – find

Click on the hyperlinked “your code”

Status – change “active” to “inactive” and click “save”

Inactivate a location in NHSN

Locations

Instructions

- To *Add* a record, fill in the form with the required fields and any desired optional values. Then click on the *Add* button.
- To *Find* a record, click on the *Find* button. One of more fields can be filled in to restrict the search to those values.
- To *Edit* a record, perform a *Find* on the desired record. Click on the desired record to fill in its values into the form and edit the values. To save the changes, click on the *Save* button.
- To *Delete* one or more records, perform a *Find* on the desired record(s). Check the corresponding box(es), then click on the *Delete* button.
- Press the *Clear* button to start over with a new form.

Mandatory fields to "Add" or "Edit" a record marked with *

Your Code *: 3N - SICU
Your Label *: SURG ICU
CDC Location Description *: Surgical Critical Care
Status *: Active
Bed Size *: 20 A bed size greater than zero is required for most inpatient locations.

Find | Save | Export Location List | Clear

Location Table

Display All | Print Location List

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Delete	Status	Your Code	Your Label	CDC Description	CDC Code	NHSN HL7 Code	Bed Size
	Active	1160-1	URGENT CARE	Urgent Care Center	OUT:ACUTE:CLINIC:UE	1160-1	
	Active	2	2	Adult Mixed Acuity Unit	IN:ACUTE:MIXED:ALL_ADULT	1210-4	2
	Active	24H OBS	24H OBSERVATION	24-Hour Observation Area	OUT:ACUTE:WARD	1162-7	15
	Active	2E - MS 2	M/S WARD	Medical/Surgical Ward	IN:ACUTE:WARD:MS	1061-1	60
	Active	2S - BMT	BONE MARROW TRANSPLANT WARD	ONC Hematopoietic Stem Cell Transplant Ward	IN:ACUTE:WARD:ONC_HSCT	1231-0	20
	Active	3E - ORTHO	ORTHO WARD	Orthopedic Ward	IN:ACUTE:WARD:ORT	1065-2	20
	Active	3EAST	MED WARD 3RD FLOORS EAST	Medical Ward	IN:ACUTE:WARD:M	1060-3	25
	Active	3N - SICU	SURG ICU	Surgical Critical Care	IN:ACUTE:CC:S	1030-6	20
	Active	3S - ONC	HEME/ONC WARD	ONC General Hematology/Oncology Ward	IN:ACUTE:WARD:ONC_HONC	1232-8	20

View Inactive Locations

Display All | Print Location List

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Delete	Status	Your Code	Your Label	CDC Description	CDC Code	NHSN HL7 Code	Bed Size
	Inactive	2T - MSICU	MED/SURG ICU	Medical/Surgical Critical Care	IN:ACUTE:CC:MS	1029-8	20
	Inactive	8201	EMERGENCY DEPT	Emergency Department	OUT:ACUTE:ED	1108-0	
	Inactive	L100	LIZTEST-CCM	Medical Critical Care	IN:ACUTE:CC:M	1027-2	25
	Inactive	MEDICAL IC	MEDICAL ICU	Medical Critical Care	IN:ACUTE:CC:M	1027-2	20
	Inactive	1	ICU	Medical/Surgical Critical Care	IN:ACUTE:CC:MS	1029-8	5
	Active	1160-1	URGENT CARE	Urgent Care Center	OUT:ACUTE:CLINIC:UE	1160-1	
	Active	2	2	Adult Mixed Acuity Unit	IN:ACUTE:MIXED:ALL_ADULT	1210-4	2
	Active	24H OBS	24H OBSERVATION	24-Hour Observation Area	OUT:ACUTE:WARD	1162-7	15
	Active	2E - MS 2	M/S WARD	Medical/Surgical Ward	IN:ACUTE:WARD:MS	1061-1	60
	Active	2S - BMT	BONE MARROW TRANSPLANT WARD	ONC Hematopoietic Stem Cell Transplant Ward	IN:ACUTE:WARD:ONC_HSCT	1231-0	20
	Active	MEDSURG CC	MEDICAL/SURGICAL CRITICAL CARE	Medical/Surgical Critical Care	IN:ACUTE:CC:MS	1029-8	8

Inactive locations in NHSN

Inactive locations:

- Data will still be sent to CMS if you don't remove from your reporting plan
- Data will still be available in analysis reports, but new data cannot be entered
- Make sure to add a new location (which is replacing the old location) and remove the old location from your reporting plan for all applicable months and moving forward

FacWideIn MDRO Denominator Form Reminders

Acute care hospitals required to report:

- Total facility patient days and total facility admissions
  - This includes units with a separate CMS CCN; however, any affiliated unit/facility that is physically separate from the hospital should be excluded (and enrolled in NHSN as separate facilities)
- MDRO patient days and MDRO admissions
  - Counts excluding patient days and admissions from CMS-certified IRFs and IPFs with separate CCNs. If you don't have either of these, repeat the first numbers
- CDI patient days and CDI admissions
  - Counts excluding patient day and admission counts from CMS-certified IRFs and IPFs with separate CCNs as well as counts from NICU and well-baby units.
    - If you don't have any of these, repeat the first numbers again

FacWideIn MDRO Denominator

General

Setting: Inpatient Total Facility Patient Days *: Total Facility Admissions *:

Setting: Outpatient Total Facility Encounters :

If monitoring *MDRO* in a FACWIDE location, then subtract all counts from patient care units with unique CCNs(IRF and IPF) from Totals:

MDRO Patient Days *: MDRO Admissions *: MDRO Encounters :

If monitoring *C. difficile* in a FACWIDE location, then subtract all counts from patient care units with unique CCNs(IRF and IPF) as well as NICU and Well Baby counts from Totals:

CDI Patient Days *: CDI Admissions *: CDI Encounters:

Denominator for IRF/IPF as CCN Locations

Your Code *: IRF LOC

Your Label *: IRF LOCATION

CDC Location Description *: Rehabilitation Ward - Within ACH

Is this location a CMS IRF unit within a hospital? *: Y - Yes

pecify the IRF CCN (will have an R or T in the 3rd position) *: 12R124 Effective Date of IRF CCN: 03/20/2015 2015Q1 Edit IRF CCN

Status *: Active

Bed Size *: 20 A bed size greater than zero is required for most inpatient locations.

Find Save Export Location List Clear

Denominator for IRF/IPF as CCN Locations

Mandatory fields marked with *

Print Form

Facility ID *: NHSN State Users Test Facility #2 (ID 15165)

Location Code *: IRF LOC - IRF LOCATION

Month *: January

Year *: 2017

General

Setting: Inpatient Total Patient Days *: Total Admissions *:

Setting: Outpatient Total Encounters :

MDRO & CDI Infection Surveillance or LabID Event Reporting

Specific Organism Type	MRSA	Report No Events	VRE	Report No Events	CephR-Klebsiella	Report No Events	CRE-Ecoli	Report No Events	CRE-Enterobacter	Report No Events	CRE-Klebsiella	Report No Events	MDR-Acinetobacter	Report No Events	C. difficile	Report No Events
Infection Surveillance	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
LabID Event (All specimens)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	* ☑	☐
LabID Event (Blood specimens only)	* ☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

Process Measures

Denominator for Freestanding IRF or LTAC

Typically don't have any units meeting the exclusion rules

Report the same values for all three (A, B, C below)

Location Code *: FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)

Month *: January

Year *: 2017

General

Setting: Inpatient Total Facility Patient Days *: 15201 Total Facility Admissions *: 1200 **A**

Setting: Outpatient Total Facility Encounters :

If monitoring *MDRO* in a FACWIDE location, then subtract all counts from nt care units with unique CCN

MDRO Patient Days *: 15201 MDRO Admissions *: 1200 **B** MDRO Encounters:

If monitoring *C. difficile* in a FACWIDE location, then subtract all counts from patient care units with unique

CDI Patient Days *: 15201 CDI Admissions *: 1200 **C** ncounters:

Provider Review Reports

Why are there sometimes discrepancies between provider reports (CMS facility compare websites) and NHSN?

- Data in reports represent the data that were entered in NHSN for a facility at the time of the CMS quarterly deadline, for each individual quarter
  - Any additions, deletions, modifications, updates, etc… that a facility makes (to their events data, summary data, procedure data, annual survey, monthly reporting plans, and/or addressing outstanding data alerts on the NHSN home screen) after each quarterly deadline will not be reflected on reports, but will be reflected within NHSN

Provider Review Reports

Annual Survey Example:

Quarter	CMS Quarterly Deadline (data pulled from NHSN)	Survey Used at Deadline	Survey Used Currently in NHSN, as of June 2017*	Survey that would be used in NHSN, as of June 2018*
2015Q3	Feb 15, 2016	2015, if entered before CMS deadline (2014 if not)	2015	2015
2015Q4	May 15, 2016	2015, if entered before CMS deadline (2014 if not)	2015	2015
2016Q1	Aug 15, 2016	2015	2016	2016
2016Q2	Nov 15, 2016	2015	2016	2016
2016Q3 **	March 15, 2017	2016, if entered before CMS deadline (2015 if not)	2016	2016
2016Q4	May 15, 2017	2016, if entered before CMS deadline (2015 if not)	2016	2016
2017Q1	Aug 15, 2017	2016	2016	2017
2017Q2	Nov 15, 2017	2016	2016	2017

*If the survey is entered by the submission deadline of March 31st of any given calendar year

**2016Q3 IRFQR and LTCHQR deadline extended to May 15, 2017

Provider Review Reports

Annual survey – once the 2017 survey has been entered during 2018 Q1, the 2017 survey will then be used for risk adjustment

CDC recommends reviewing and printing/saving CMS reports and data on the day of the CMS deadline for future reference as it should match

Data entry and data modified dates

Advanced

- Events, summary procedure, annual survey, or reporting plan linelist
  - Users can add the “modifyDate” and “modifyUserID” variables to see when and by whom the data were last modified
  - Users can add “createdate” and “createUserID” to see when the data were first entered
  - Note: this does not account for any deleted records and will not state how the record was modified (or how many times it was modified-only the most recent time)

SURs Available Now

Scalable, risk-adjusted measure that can be compared across locations and facilities because they are risk-adjusted accordingly

- DURs can only be compared amongst the same location
- SUR interpreted similarly to SIR: ratio of observed to predicted device days

AUR Resources Posted

https://www.cdc.gov/nhsn/acute-care-hospital/aur/index.html

New Presentations Posted:

- Antibiotic Stewardship: Optimizing Antibiotic Use in the Inpatient Setting
- Antimicrobial Use and Resistance Module Protocol
- Standardized Antibiotic Administration Ratio
- Antimicrobial Use Option Analysis Training

NHSN Beta Testing

Planning two week beta testing period prior to the full production release scheduled for December 9, 2017

October 23-November 3, “dummy data” will be populated in the beta environment for testers to manipulate

New data will be available each morning

Will provide NHSN users an opportunity to explore new NHSN features and potentially identify issues

Looking for volunteers, so please contact NHSNBeta@cdc.gov if you want to participate

Update to NHSN Agreement to Participate and Consent

Important – updated NHSN agreement to participate and consent will be available for review and electronic signature with the December NHSN release

Primary contacts MUST accept this form by February 24, 2018 or will risk losing access to NHSN

Once it is available with the new release, an alert will appear on all NHSN component home pages and primary contacts and facility administrators will receive an email notification

Additional info and FAQs will be available online later this year

SIR Risk-Adjustment Updates

SIR Updates

As of July 2017, the CLABSI models have been corrected

Acute Care Hospitals

Factor	Corrected 2015 Model	Incorrect 2015 Model
Location	• 11 categories • Oncology ICUs grouped with other ICUs, separate from oncology wards • Pediatric Wards grouped separate from adult wards	• 8 categories • Oncology units grouped by age category rather than acuity level • One large category inclusive of all wards
Facility Bedsize	• 3 levels: ○ ≥224 beds ○ 94-223 beds ○ ≤93 beds (ref.)	• 2 levels: ○ ≥296 beds ○ <296 beds (ref.)
Med School Affiliation	• 3 levels: ○ Major ○ Graduate ○ Undergrad/Non-Teaching (ref)	• 2 levels: ○ Major, Graduate, Undergraduate ○ Non-teaching (ref.)
Facility Type	• Military and VA Hospitals grouped with Women's/Children's Hospitals	• Military and VA Hospitals grouped with all other hospitals (e.g., Gen., Ortho, etc.)

Updated CLABSI Models, cont…

Critical Access Hospitals

Factor	Corrected 2015 Model	Incorrect 2015 Model
Intercept only	-8.2066	-8.1259

Long Term Acute Care Hospitals

Factor	Corrected 2015 Model	Incorrect 2015 Model
Location	• ICU vs. Ward, different parameter estimate	• ICU vs. Ward
Facility Bedsize	• ≥45 beds vs. <45 beds (ref)	• ≥54 beds vs. <54 beds (ref)
Length of Stay	• ≥28 days vs. <28 days (ref)	• ≥24 days vs. <24 days (ref)
Proportion of admissions on a ventilator	• **NEW** • 3 levels: ○ ≥0.328 ○ 0.125-0.327 ○ <0.125	• Not included
Proportion of admissions on hemodialysis	• **NEW** • 3 levels: ○ ≥0.138 ○ 0.008-0.137 ○ <0.008	• Not included

Updated CLABSI models, cont…

Inpatient Rehabilitation Facilities*

Factor	Corrected 2015 Model	Incorrect 2015 Model
Proportion of admissions with stroke	• **NEW** • ≥0.135 vs <0.135	• Not included
Proportion of admissions due to other, non-specific diagnostic categories	• **NEW** • ≥0.197 vs <0.197	• Not included

**previous IRF CLABSI model was intercept-only*

Updated SIRs

Updated CAUTI models were also corrected and implemented July 21, 2017

In order to obtain the corrected SIRs in the NHSN application, make sure to generate datasets prior to running CLABSI or CAUTI SIRs and TAP reports

For full models and information, visit: https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf

Group Analysis Updates

6/28/17: group users were unable to see results in the MDRO LabID rate tables and MRSA bacteremia SIR reports

7/12/17: these reports were working and group users should regenerate datasets

8/8/17: some acute care hospital reports were being displayed incorrectly in group data for some groups

- This issue was corrected on 7/28/17 – regenerate datasets

Note: this does not/did not impact individual facilities or CMS data

Resolved Issues

Rights conferral error – some facilities were receiving an error screen when they tried to confer rights to a group

CSV Import issues

- With "height is required" even though height in meters is included in the file
- With "error contacting server" message when trying to submit import file
- Giving "Patient xxxx Already Exists" error when trying to import valid duplicate procedures

NHSN Trainings

CE credits are now available for those who have viewed the 2017 NHSN training webstream videos

All archived webstream videos are available on the NHSN Training website under the dropdown menu entitled "NHSN Webstreaming and Webinar Events": http://www.cdc.gov/nhsn/Training/continuing-edu.html

Step by step directions on accessing the CDC CE registration and online system can be found: http://www.cdc.gov/nhsn/Training/continuing-edu.html

2017-2018 Recommended Prerequisite Trainings

Recommended to complete prior to attending or webstreaming the 2018 Annual NHSN training

- Self-paced and completed at the convenience of the learner
- Include:
  - NHSN Quick Learns
  - NHSN Self-paced Interactive Trainings (CBTs)
  - 2017 NHSN Training Archived Webstream Videos

New Quick Learn Available

The **Determining Healthcare Association or Present on Admission Infections and Other Rules** Quick Learn is now live on our NHSN website!

This 15 minute video focuses on the definition and rules for identifying healthcare-associated infections found in Chapter Two of the NHSN Patient Safety Manual. Please visit the NHSN website to view the full chapter.

- The video covers:
  - Infection Window Period (IWP),
  - Date of Event (DOE)
  - Present on Admission (POA) Infections
  - Healthcare-Associated Infections (HAI)
  - Repeat Infection Timeframe (RIT)
  - Secondary Blood Stream Infection (BSI)
  - Attribution Period
  - Pathogen assignment.

Click https://www.cdc.gov/nhsn/training/quicklearns.html to view them now!

Data Entry Training eBook Now Available

Users new to NHSN!

80 page eBook provides step-by-step directions to get started with entering data into NHSN for:

- Monthly Reporting Plans
- Patient Information
- Linking Records

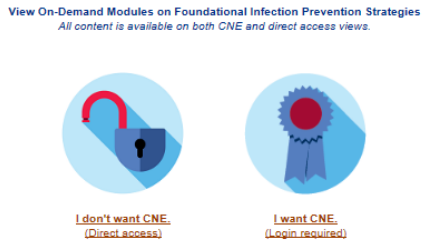
https://www.cdc.gov/nhsn/training/analysis/index.html

STRIVE Modules

On-demand modules now accessible without logging in

http://www.hret.org/quality/projects/strive-education.shtml

Go to: "On-Demand Modules: Foundational Infection Prevention Strategies" and On-Demand Modules: Preventing HAIs"



HAIs in the News

New Core Elements – Press Release

New Core Elements for Small and Critical Access Hospitals

CDC has just released a new resource for small and Critical Access Hospitals that was guided by providers in these settings and is designed to address their unique challenges. The Implementation of Antimicrobial Stewardship Core Elements at Small and Critical Access Hospitals uses the CDC Core Elements of Hospital Antibiotic Stewardship Programs as a framework for initiating and/or expanding antibiotic stewardship activities.

APIC E-News Highlights

June 28: MegaSurvey Compensation Dashboard now available for purchase through APIC

July 5: AHRQ released a new Toolkit To Improve Safety in Ambulatory Surgery Centers with customizable resources to help ASC facilities advance their safety culture

July 12:

- New CDC director appointed, Dr. Brenda Fitzgerald, MD
- APIC has a new webpage to house social media posts and resources that you can use to start conversations on social media

Candida auris Webinar

Clinician Outreach and Communication Activity (COCA) Webinar – August 15, 2017

Slides provided in the file share box

Provided by CDC, Title: "Tackling an Invasive, Emerging, Multi-drug Resistant Yeast: *Candida auris* – What Healthcare Providers Need to Know"

SHARP Unit Updates

Outbreaks

ICAR Update

Infection Control and Response (ICAR) program is still looking for acute care, LTC and outpatient facilities to have an infection control needs assessment. Great opportunity to self-evaluate IP program! To date we've completed 24 needs assessments in acute care, long-term acute care, critical access, long-term care, outpatient and dental clinics. Preliminary data was presented at National APIC and it was well received.

- Lessons learned (so far) include: No program is perfect, there is always some room for improvement.
- Infection prevention involves a lot of departments
- ICAR is a great tool

Biosafety and Healthcare Preparedness

Join us for Laboratory Biosafety and Healthcare preparedness meetings. Learn about emerging pathogens, epidemiology, outbreaks and even what the lab does!

Region 8 and 7 meetings occurred in early August and have been well received. Region 6 next on September 19. See the agenda for more details.

Reporting Changes on the horizon

Disease/Condition	Required to be Reported	New Condition in MDSS	New Standardized Case Definition	New form in MDSS
Carbapenemase-Producing Carbapenem-Resistant Enterobacteriaceae (CP-CRE)	**Y**	**Y**	**Y**	**Y**
Perinatal Hepatitis C	Y - no changes to current reporting requirements	Y	Y	Y
Perinatal Hepatitis B	Y - no changes to current reporting requirements	N	N	N
Candida auris	**Y – Unusual Occurrence**	**N**	**Y**	**N**
Extrapulmonary Non-Tuberculous Mycobacterium (NTM)	N - Optional	N	Y	Y
Latent Tuberculosis Infection (LTBI)	N - Optional	Y	Y	Y

Messaging and Guidance Coming soon!

Local Health Departments

CP-CRE will now be a routinely reportable condition coming through the MDSS

A new condition (CP-CRE) and case detail form are in development

MDHHS is also developing tools to guide in the investigation of CP-CRE cases reported to the MDSS

- MDHHS is working to understand how to integrate this current process with upcoming reporting mandates

Messaging and Guidance Coming soon!

Clinical Laboratories

Laboratories will soon be able to electronically report CP-CRE results to our surveillance system via HL7 v2.5.1 messages.

These HL7 messages can be more complex for CP-CRE than some of the other reportable conditions and we're developing guidance on how to properly format them

If a laboratory cannot report CP-CRE to MDSS via HL7 message by January 2018, facilities should develop processes to manually report these cases into the MDSS

In the meantime…

CRE Surveillance and Prevention Initiative

- Enrolled 22 new facilities
  - **We are now up to 62 facilities!!!**
- All facilities are joining the same cohort in September 2017
  - Adding *Klebsiella* spp
  - Adding *Enterobacter*
  - Re-baselining September 2017-February 2018

Upcoming Local Trainings and Conferences

MSIPC Fundamentals in Infection Control – September 12, 13, 14
- Crowne Plaza, Lansing
- www.msipc.org

2017 HITS (Healthcare Infection Transmission System) Annual Meeting – September 13, 14
- NSF International Headquarters, Ann Arbor
- http://www.hitsconsortium.org/index.php

MSIPC Fall Conference – October 19-20
- Crowne Plaza, Lansing
- www.msipc.org

Regional Biosafety and Healthcare Preparedness Conferences (see flyer for registration)
- September 19: Grand Rapids
- September 21: Lansing
- September 26: Kalamazoo
- October 3: Bay City
- October 11: Plymouth

Thank you!

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Next Michigan NHSN User Group Call

Wednesday, October 25th, 2017